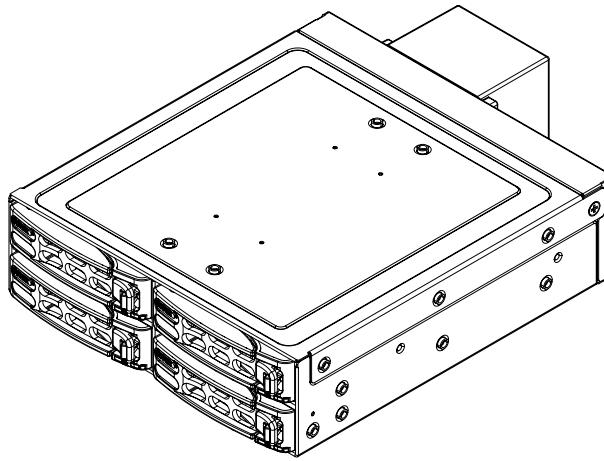
SUPER®



CSE-M14T

Mobile Rack

USER'S GUIDE

Rev. 1.0

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Chapter 1
Introduction

1.1 Overview

This manual is written for system integrators, PC technicians and knowledgeable PC users who intend to integrate Supermicro's intelligent, highly-expandable and cost-effective mobile rack solutions into their systems. It provides the user with detailed information for the installation and use of the CSE-M14T Mobile Rack.

The Supermicro CSE-M14T Mobile Rack, supporting up to four hot-swap SAS/SATA hard drives, packaged in the small size form factor (5.8" W x 1.7" H x 7.9" D) and running up to 3 Gbps, showcases today's most advanced technology innovations in modular connectivity and data transferability, laying the foundation for reliable, effective and scalable solutions for tomorrow's data communications industry.

1.2 Product Features

The CSE-M14T Mobile Rack:

- Slim design: small size form factor (SFF) (5.8" W x 1.7" H x 7.9" D)
- Supports 4 x 2.5" hot-swap SFF HDD
- Supports up to 5V/10A (Average) and 12V/10A (Average)
- Running up to 3 Gbps
- Supports SAS/SATA

Operating Systems supported

* Windows 2000, Windows XP, and Windows 2003
* Linux: Red Hat and SuSE
* Upgradable in the future

System Monitoring

* Overheat/Fan Fail LED indicators and audible alarm indicating system overheat or fan failure
* Drive Activity LED to indicate the activity status of each disk drive

An Important Note to the User

*The pictures or graphics shown in this User's Guide were based upon the latest PCB revision available at the time of the publishing of this manual. The CSE-M14T Mobile Rack you've received may or may not look exactly the same as the graphics shown in this manual.

1.3 Contacting Supermicro

Headquarters

Address: SuperMicro Computer, Inc.
980 Rock Ave.
San Jose, CA 95131 U.S.A.
Tel: +1 (408) 503-8000
Fax: +1 (408) 503-8008
Email: marketing@supermicro.com (General Information)
support@supermicro.com (Technical Support)
Web Site: www.supermicro.com

Europe

Address: SuperMicro Computer B.V.
Het Sterrenbeeld 28, 5215 ML
's-Hertogenbosch, The Netherlands
Tel: +31 (0) 73-6400390
Fax: +31 (0) 73-6416525
Email: sales@supermicro.nl (General Information)
support@supermicro.nl (Technical Support)
rma@supermicro.nl (Customer Support)

Asia-Pacific

Address: SuperMicro, Taiwan
4F, No. 232-1 Liancheng Road
Chung-Ho 235, Taipei Hsien, Taiwan, R.O.C.
Tel: +886-(2) 8226-3990
Fax: +886-(2) 8226-3991
Web Site: www.supermicro.com.tw

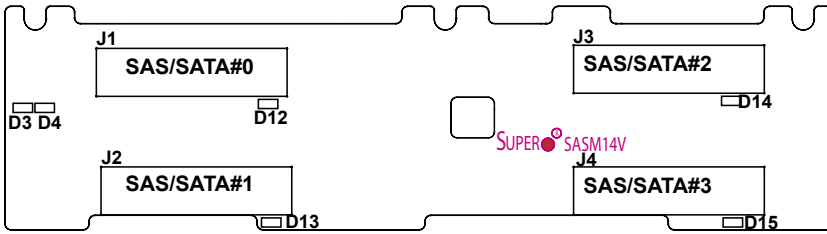
Technical Support:
Email: support@supermicro.com.tw

Chapter 2

SASM14V Backplane

2.A. SASM14V Front Panel

(Front View)



2.A.1 Front Connectors

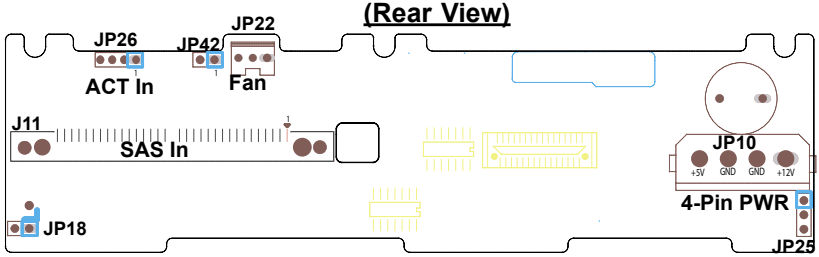
Front Connectors	
J1	SAS/SATA#0
J2	SAS/SATA#1
J3	SAS/SATA#2
J4	SAS/SATA#3

2.A.2 Front LED Indicators

Front LED Indicators	
D3	Overheat LED
D4	Fan Failure LED
D12	SAS/SATA#0 ACT LED
D13	SAS/SATA#1 ACT LED
D14	SAS/SATA#2 ACT LED
D15	SAS/SATA#3 ACT LED

2.B. SASM14V Rear Panel

(Rear View)



2.B.1 Rear Side Connectors

JP10: 4-pin power connector

There is a 4-Pin Power Connector (JP10) located on the rear side of the SASM14V Backplane. This power connector must be connected to your power supply to provide adequate power to the backplane. See the table on the right for pin definitions.

4-pin Power Connector Pin Definitions	
Pin#	Definition
1	+12V
2	Ground
3	Ground
4	+5V

JP11: SAS-In (connector)

JP22: 3-pin Fan (Header)

There is a 3-pin fan header (JP22) located on the rear side of the SASM14V Backplane. Connect a cable to the fan header to provide cooling to the backplane. See the table on the right for pin definitions.

Fan Header Pin Definitions (JP22)	
Pin#	Definition
1	Ground
2	+12V
3	Tachometer

JP26: ACT-In (Header)

A 4-pin Act-In header (JP26), located on the rear side of the SASM14V Backplane, indicates the activity status of SAS/SATA slots that are installed on the front side of the backplane. See the table on the right for pin definitions.

Act-In Header Pin Definitions (JP26)	
Pin#	Definition
Open	Act-In#0-#3 (Default)
1	Act-In#0
2	Act-In#1
3	Act-In#2
4	Act-In#3

2.B.2 Rear Side Jumpers

Jumper	Description	Definition
JP18	Open (*Default)	Normal
	Closed	Buzzer Reset
JP25	Open	Set Overheat Temperature to 45^{0}C
	Pins 1-2 (*Default)	Set Overheat Temperature to 50^{0}C
	Pins 2-3	Set Overheat Temperature to 55^{0}C
JP42	Open	Fan Disabled
	Closed (*Default)	Fan Enabled

Chapter 3

Installation Instructions

3.1 Packing List

Examine the following items that are included in your shipping package. If any items are missing or damaged, please contact your retailer immediately.

*One 4-drive Mobile Rack Cage (CSE-M14 ((B)) P)
*Four hot-swap 2.5" HDD trays
*One cooling fan assembly (40MM)
*One screw set for 4 HDDs
*One SAS/SATA Backplane (CSE-SAS-M14EV)
*One SATA Big4 to individual port fan out cable (CBL-0103)

3.2 Tools Needed

The following tools are needed for the installation of the mobile rack into chassis.

1. Phillips Screw Driver
2. Antistatic Strap (recommended)

3.3 Important Safety Guidelines

This product shall only be accessed, assembled and serviced by technically qualified personnel or technicians. To avoid personal injury and property damage, please carefully follow all the Safety Guidelines listed below before accessing or servicing the CSE-M14T.

Safety Steps

Before accessing the Mobile Rack:

1. Turn off all peripheral devices and the power supply connected to the chassis and unplug all power cords from the system or the wall outlets.
2. Disconnect all the cables and label the cables for easy identification.
3. Use a grounded wrist strap designed to prevent static discharge when handling components.
5. Save all the screws and fasteners for later use. (If necessary, label these screws or fasteners for easy identification.)
6. Follow the instructions given in the following section to remove and install the cooling fan, hard disks and the rear window.

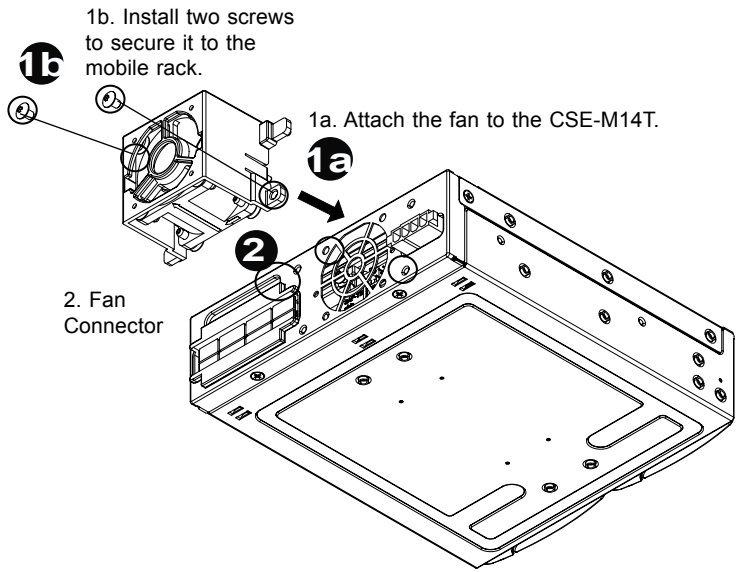
3.4 Cooling Fan Installation and Removal

(*Note: If your CSE-M14T Mobile Rack is a stand-alone model, you will need to install the cooling fan onto the CSE-M14T before using it.)

Procedures (-Fan Installation)

1. Attach the cooling fan to the CSE-M14T Mobile Rack and secure it to the Mobile Rack with two screws on both sides of the fan.

2. Connect the cooling fan cable to the Fan Connector as shown below.



Procedures (-Cooling Fan Removal)

Reverse the steps listed above to remove the cooling fan from the CSE-M14T.

3.5 HDD Installation

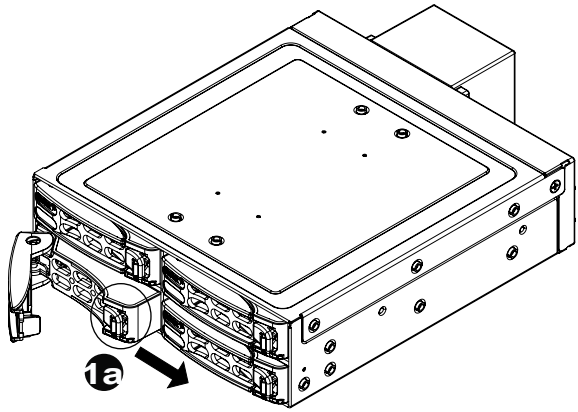
3.5.1 Removing the HDD Drive Tray

Before installing the hard disk into the CSE-M14T, you will need to remove the HDD drive trays from the cage.

Procedures

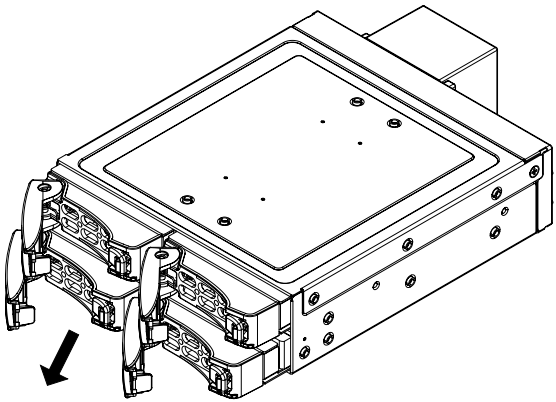
1. Press the release tab toward the right to release the HDD drive tray from the CSE-M14T cage.

2. Once the drive tray is unlocked, pull it out from the CSE-M14T.



1. Press the release tab toward the right to release it.

3. Follow the procedures above to remove other HDD drive trays.



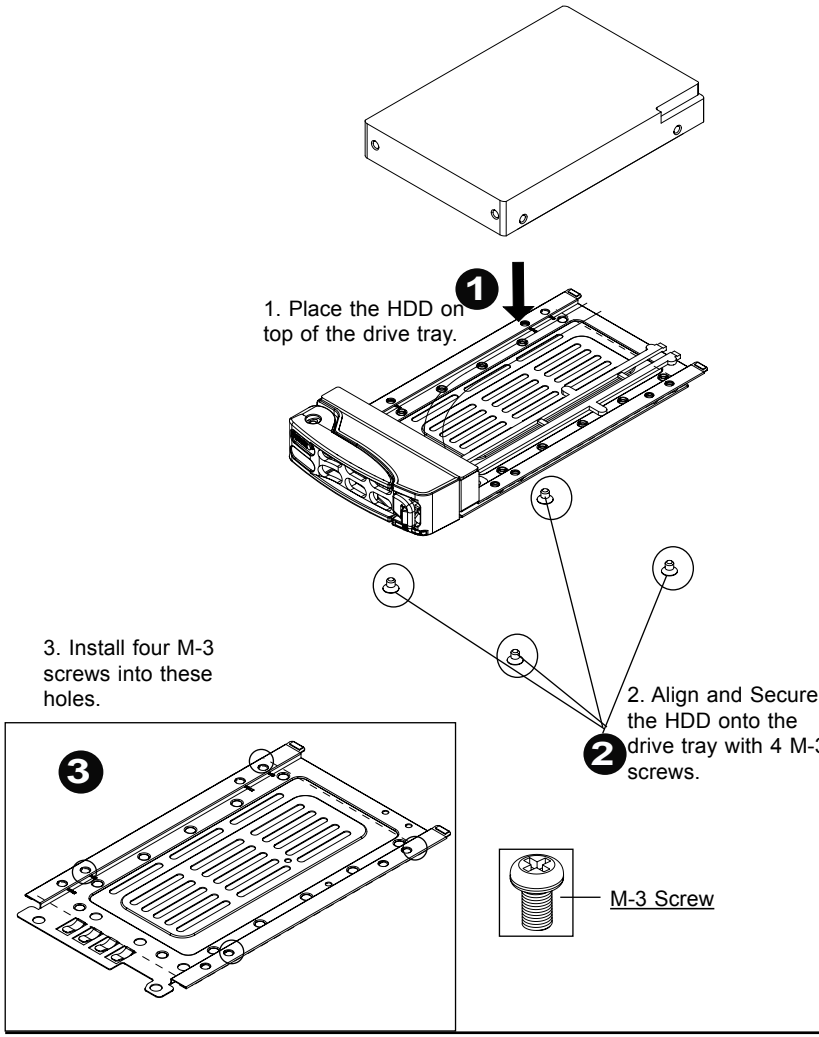
3.5.2 Installing the Hard Disk Drive into the Drive Tray

Procedures

1. Place a 2.5" Hard Drive Disk on top of the drive tray.

2. Align the HDD against the drive tray.

3. Secure the HDD onto the drive tray by installing four M-3 Screws into the holes as shown below.

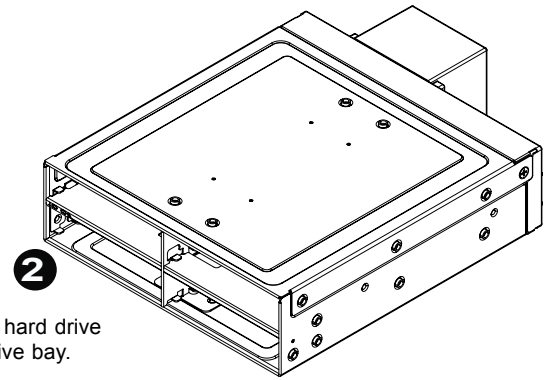

1
1. Place the HDD on top of the drive tray.
3. Install four M-3 screws into these holes.
2. Align and Secure the HDD onto the drive tray with 4 M-3 screws.
2
3
M-3 Screw

3.5.3 Installing Hard Disk Drives into the Mobile Rack

Procedures

1. After you've installed a hard disk drive into a drive tray as indicated in Section 3.5.2, you are ready to install the HDD into the mobile rack.

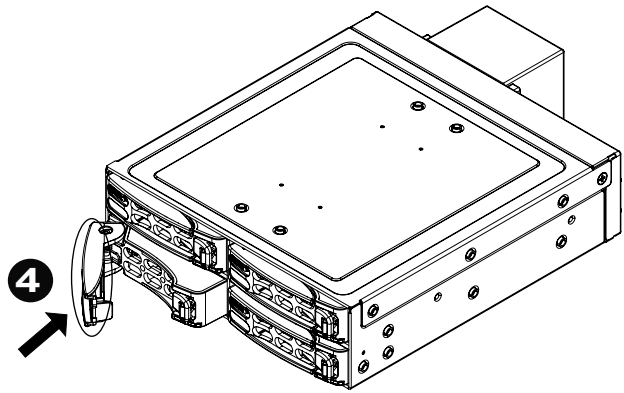
2. Insert a hard drive into a drive bay located in the mobile rack as shown below.



1. Insert a hard drive into the drive bay.

3. Push the HDD inward until it is fully seated into the drive bay.

4. Press the handle toward the locking position. When the handle is in the correct position, the handle will automatically lock.



4. When the handle is in the correct position, the release tab will automatically lock.

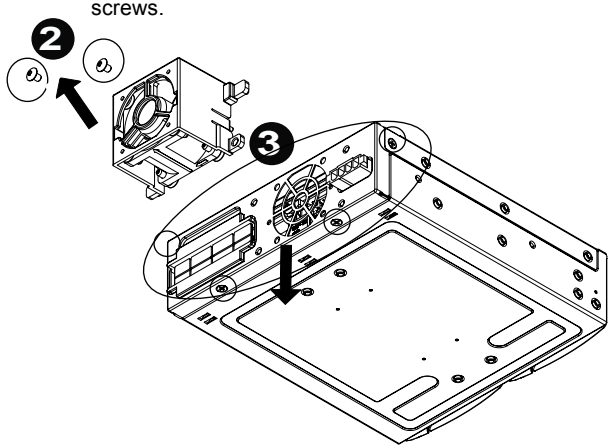
3.6 Rear Window Removal (*Optional)

Procedures

1. Follow the procedures listed on Section 3.4 to remove the cooling fan from the CSE-M14T.

2. After the cooling fan is detached, remove the four screws from the CSE-M14T as shown below.

2. Remove the screws.



3. Pull the rear window away from the mobile rack to remove it.

3. Once the screws are removed, pull the rear window away from the CSE-M14T to remove it.

Procedures (-Rear Window Installation)

Reverse the steps listed above to install the Rear Window onto the CSE-M14T.

Notes